



an Open Access Journal by MDPI

## Lipid oxidation in Food and Biological Systems: Analytical Approaches, Mitigation Strategies and Health Status

Guest Editors:

**Dr. Vito Verardo**

**Dr. Celia Rodriguez Perez**

**Dr. Federica Pasini**

Deadline for manuscript  
submissions:

**closed (31 March 2020)**

### Message from the Guest Editors

Lipid peroxidation occurred in biological systems due to the effect of oxidative stress and free radicals on lipid compounds. The in vivo accumulation of oxidized lipid products is related to the development of several diseases.

The Special Issue welcomes recent research topics and current review articles related to, but not limited to the following:

- Lipid oxidation determination using different analytical approaches in food and biological system
- Detection of lipid changes during food processing and shelf-life, including the formation of unhealthy compounds
- Relationship between lipid oxidized products and “health and disease”
- Effects of antioxidant compounds and other technological strategies (i.e., active packaging, mild technologies, food emulsions, etc.) on lipid oxidation in food
- Effects of antioxidant compounds on lipid peroxidation in vitro and in vivo systems
- Similarities and differences of photo-oxidation, enzyme-catalyzed oxidation and free radical oxidation and their involvement in lipid oxidation of foods
- The involvement of iron-catalyzed and heme-pigment-catalyzed oxidation in meat



[mdpi.com/si/27986](https://mdpi.com/si/27986)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alessandra Napolitano

Department of Chemical  
Sciences, University of Naples  
"Federico II", Via Cintia 4, I-80126  
Naples, Italy

## Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, PubAg, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)

## Contact Us

---

*Antioxidants* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/antioxidants](http://mdpi.com/journal/antioxidants)  
[antioxidants@mdpi.com](mailto:antioxidants@mdpi.com)  
[X@antioxidants\\_OA](https://twitter.com/antioxidants_OA)